STEGANOGRAPHY SYSTEM WITH SCALE/ROTATION DETECTION

Abstract of the Disclosure

An excerpt of an image is analyzed for a steganographic spectral signature. Any rotation of the image from its original orientation is manifested as an up-shifting of the signature's frequency. Rotation of the image to minimize the frequency of the spectral signature restores the image to its original orientation. Image scaling, too, is manifested as a change in the spectral signature, and can be compensated for by rescaling the image (after rotation correction) so the spectral signature matches its original characteristic. By such techniques, automatic detection of steganographic data can be achieved notwithstanding scaling and/or rotation of the encoded data set. Such capability can be used, e.g., in photo-duplication kiosks to detect steganographically-embedded copyright notices in original photographs, and prevent their unauthorized copying.